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BERWICKSHIRE
NATURALISTS' CLUB

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OFFICE BEARERS
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President.

L. H. CLEAT, Esq., B.Sc.C.Eng., M.I.Chem.E., Redbrae, Gavinton, Duns.
(Tel. Duns (0361) 83400).

Joint Field Secretaries.

D. MACKENZIE ROBERTSON, Esq., 4 Hermitage Lane, Kelso.
Mrs D. MACKENZIE ROBERTSON, M.C.S.P., F.S.A.Scot.
(Tel. Kelso (0573) 324252).

Corresponding Secretary and Treasurer

Miss S. G. STODDART, W.S., Ayton. (Tel. Ayton (08907) 209).

Editing Secretary.

Lady B. McEWEN, Polwarth Crofts, Polwarth, Duns.
(Tel. Duns (0361) 83323) (To June, 1988).
Professor W. H. R. Lumsden, 16A Merchiston Crescent, Edinburgh EH10
5AX. (Tel. Edinburgh (031) 229 2702) (From June, 1988).

Librarian.

Miss M. H. SIMPSON, J.P., A.L.A., 124, Shielfield Terrace, Berwick upon
Tweed. (Tel. Berwick (0289) 307805).

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CLUB NOTES

In many recent years the Club's visits have been reported only very briefly in *Club Notes*. A fuller report was made in 1986 under the title—*Field Secretaries' Report*—but was still placed in the 'preliminary' pages of the Part. It seems appropriate to accord the expanded 'Field Secretaries' Report' a full heading and place it in the general body of the text of a Part; as is now done.

Consequently, *Club Notes* can be reserved in future for general Club news or intimations and for editorial comment. In the present Part, attention is drawn to a new entry—*Advice to Contributors*—printed on the inside back cover. It is hoped that this will encourage the submission of manuscripts.

The Editing Secretary would welcome comments on this and on any other aspect of the *History*.

PROCEEDINGS
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

SIR ARCHIBALD COCKBURN
2nd BARONET OF LANGTON

*being the Anniversary Address delivered by L. H. Cleat,
Esq., B.Sc., M.I.Chem.E., President of the Club, on 21st
October, 1987.*

HISTORY faithfully records the lives of kings and princes. But little is written about less distinguished mortals; we can only make a guess at their story and the reasons for their actions. However, interest in the fortunes of others remains strong. Thus the presentation of this brief biography is both a pleasant and a hazardous undertaking. I believe the facts are mainly correct but why all happened in the way it did cannot now be explained.

I have attempted to describe the life of a vigorous, intelligent, far-seeing, astute, and sometimes despised, laird who owned, at one time, all the lands of Langton, an estate which extended over the entire Berwickshire parish of that name and beyond. After hearing the account of his life you may wish to draw your own conclusions about this controversial figure. The following is my description of the life, and something of the times, of Sir Archibald Cockburn, 2nd baronet of Langton.

A few words of introduction to the Cockburns of Langton are necessary. The family of Cockburn, which was to sprout so many branches, can be traced back to the Alexander Cockburne who, in about 1330, married Mariota de Veteri Ponte, or Vieuxpont, or Vipont as it became in Scotland. She was an heiress of Norman descent, the only child of Sir William Vipont who was slain on the field of Bannockburn

in 1314.¹ It was Mariota who brought the lands of Langton, and much else, to the Cockburns and from them sprang the line which continued there for over four hundred years.

There were many other branches of this prolific family; such as the Cockburns of that Ilk (that is to say 'of Cockburn' itself), of Ormiston, Henderland, Bolton, Skirling, Choicelee, Ryslaw, Caldra, Newbigging, Clerkington, Cockpen, and others. This account is confined to the above-mentioned Sir Archibald who owned the estate of Langton in the second half of the 17th century.

There existed, at that time, a village of Langton which must have been a place of some importance. In 1595 it was granted a charter by James VI allowing it to be 'erected', that is to say created, a burgh of barony. Such a charter permitted the village to hold a weekly market, to erect a cross, and to hold two fairs annually plus other privileges. There is no indication, however, that the charter was implemented and no trace remains of the old Langton village.^{2,3}

Sir William Cockburn, father of Archibald, was created a baronet of Nova Scotia, by Charles I, in 1627. On his death in 1656, his eldest son inherited the baronetcy and the estate. Possession of the lands of Langton by Sir Archibald is confirmed in a charter of 1662 and again by a second charter of 1681.⁴

Sir Archibald also inherited certain offices pertaining to the Court. One of these was Keeper of the Great Seal of Scotland to which an earlier Cockburn, Sir Alexander, had been appointed in 1306. Another hereditary duty was Principal Ushership to the King; a position sometimes called Ostiarius Parliamenti. The original charter conferring this dignity was drawn up at Scone in the fourth year of the reign of Robert II (c1374). The Ushership of the White Rod, as it was later called, carried a small salary of £250 per annum to which was added the registration fees paid by newly created Scottish peers, baronets, and knights. In Sir Archibald's day there appears to have been no demanding duties attached to the Ushership except taking part in State functions, including coronations. At the opening of the Scottish Parliament on 28th July, 1681, it is recorded that Sir Archibald Cockburn of Langton took his place as the Gentleman Usher of the White Rod.⁵

The Ushership was a mixed blessing. From time to time there seem to have been several claimants to the office and

disputes arose about the fees. These difficulties were solved only after long lawsuits.

It was perhaps a little earlier than Sir Archibald's time that the Cockburns moved out of Langton Castle. This ancient stronghold stood in a commanding position in what used to be known locally as 'Little Byres Park', on a spot some 350 yards due south of a modern house called Langton Edge. The Castle was still occupied in 1608 when Sir Archibald's grandfather signed and dated a document and added the words 'at the Castle of Langton'.⁶

The Cockburns built a more commodious and comfortable dwelling overlooking the Langton Burn, a move made possible by the decreased need to occupy a house which could be easily defended. The new building must have been large because, when the hearth tax was introduced, Sir Archibald was taxed on twenty-five hearths. Only one other house in Berwickshire contained more fireplaces. This was Thirlestane Castle with forty-five.⁷ The new situation was more sheltered from the elements and commanded a pleasant view across the burn.

At this point I would like to digress for a moment to consider the state of farming in Scotland three hundred years ago. In the 17th century the fields were not enclosed by fences or hedges. The arable land was worked, as it had been for centuries, in accordance with the runrig system of farming. The arable land was divided among the many tenants of a farm and was cultivated in common; each small farmer being allocated a number of strips of ground which were not always adjacent. Indeed, in some areas adjacent strips often belonged to different proprietors. Drainage was poor or non-existent. The miserable crops of oats or bere (a rather primitive form of barley) were smothered in weeds. The tenants held the land on very short leases: 3, 5, 7, or at most 9 years. Thus, there was no incentive to improve the land because the strips were often reallocated annually, sometimes by lot, and any work put in to improve the fertility of the soil would, most likely, benefit someone else. The proprietor did not bother because he knew no better and, in any case, he was quite uninterested.

Sir Archibald, unlike most landowners, was very interested in agriculture and commenced to improve his estate by enclosing the land and planting trees for shelter. He instructed that walls and fences should be built round the

various areas of arable ground and also planted hedges round his fields and parks. He planted and enclosed so extensively that he petitioned the Privy Council to allow him to divert a public road which ran through his estate.⁸ He did so because there were two roads which crossed his land and he wished the public to be restricted to the use of only one. It was also necessary that he should improve this road because 'the way lying through the said Archibald his land betuixt Langtoun and Chously (now Choicelee) by reason of marishes and quagmyres and ane strait brae lying at the west end of Langtoun is very incommodius and impassable'.

However, the draining of marshes and quagmires and the levelling of braes were costly undertakings and imposed a heavy strain on his resources which became all too apparent some time later.

If I may be permitted to comment, priorities are rather different today. Roads are now constructed in the manner and direction which meet with the requirements of the Minister of Transport. In Sir Archibald's time there was no such person and the public highway could be re-routed without too much fuss.

Sir Archibald's determination to pursue a programme of land improvement and enclosure anticipated his fellow landowners by 60 to 70 years. The main period of agricultural improvement in Scotland was the middle of the 18th century. Sir Archibald was one of the earliest landowners to enclose his land and he did so some fifty years before the enclosures in Galloway. The Galloway enclosures, commencing in the 1720's, are usually considered to be among the first in Scotland.

I need not stress the importance of fences and dykes to keep out your neighbours' cattle if you wished to benefit from improving your land. Three hundred years ago Scotland suffered from being overstocked with small, under-sized beasts. The local cowherds—small boys whose task it was to see that the cows under their care did not wander too far away—were only too happy to drive their charges on to land bearing a good crop of grass, or anything else!

Among the new methods of farming undertaken by Sir Archibald was the purchase of highland cattle for fattening. At that time this practice was quite unknown. He entered into a contract with John Campbell of Glenorchy for the supply of 'five hundred highland cowes yeirly for the space

of thrie yeirs, the price of each cow to be 20 merks Scots' (less than £2 sterling).⁹

Sir Archibald appears to have been a religious man and staunchly supported the cause of Presbyterianism. Although he lived in a time of much religious change and strife, he was never persecuted for his beliefs. In 1679, although Presbyterian ministers were forbidden to preach in the kirks, he petitioned the Privy Council to permit Luke Ogle, the minister of the parish, to be allowed to hold services at Langton.¹⁰ The petitioner is incorrectly recorded as Sir James Cockburn of Langton but there can be no doubt that it was Sir Archibald who was applying on behalf of the parishioners and himself. Sir James Cockburn of Cockburn, his kinsmen and near-neighbour, was created a baronet in 1671 and was often confused with Sir Archibald by later historians.

Permission was granted and Luke Ogle, and other ministers, held services on Langton estate. These took place, initially, in one of the houses attached to the old Castle which was no longer occupied. This meeting house would be rather dilapidated. Sir Archibald built a chapel in Langton Wood as a replacement so that the parish minister could still preach without breaking the conditions of the agreement.¹¹ Unfortunately, there is no visible trace of this small chapel today.

Sir Archibald, as a large landowner and important man, took part in local administration and held many public offices. He was, naturally, a magistrate and took his turn on the bench. In 1669, along with two others, he formed a court to try Henry Wilson of Fogo Mill who was suspected of practising witchcraft. The unfortunate man had been confined within Dunse Tolbooth for some time.¹² The verdict of the court is not on record.

Another of his public duties is now, happily, no longer necessary. In 1672 he was appointed an overseer of the levies of seamen from the County of Berwick. These were raised from the fishing villages on the coast. Some time later, along with the laird of Polwarth, he was requested to look into the feasibility of other methods of raising this levy. This followed the appeal by the heritors of Coldingham that the ten men required should be drawn in a more equitable manner from the villages of Eyemouth, Coldingham, Rosse, and Northfield. The seamen were part of a total of five hundred requested for war against Holland.¹³

Sir Archibald was Colonel of the Berwickshire Militia.

When ordered by the Privy Council, he mustered the regiment at Dunse or Fogomuir and inspected the weapons with which the men were armed. Swords were common and sometimes a pistol was carried; but occasionally they were unarmed.¹⁴ After the battle of Bothwell Brig, on the 22nd June, 1679, where the Covenanters were routed, he was ordered to take charge of the prisoners, numbering some 1100 to 1200, and escort them to Edinburgh. On this occasion he commanded two militia regiments and a troop of dragoons. It must be mentioned that the subsequent incarceration and ill-treatment of these prisoners in the yard behind the Church of Greyfriars, Edinburgh, was not part of his duties and he took no part in these events.¹⁵

Sir Archibald represented Berwickshire in the Scottish Parliament in the years 1678, 1685-6, and 1689-1702. When his financial position became serious, he was not above suing his neighbour, Sir James Cockburn, who was also a Parliamentary Commissioner for the County, for one hundred pounds Scots as his portion of the commissioners' fees.¹⁶

He was called on to carry out other duties pertaining to Church and State. In 1690 his name appears as a member of a committee on church affairs.¹⁷ In the previous year he was appointed a commissioner responsible for raising a sum of 288,000 pounds Scots (£24,000 sterling) to supply and equip troops, one can suppose, to fight and defeat the deposed James II & VII in Ireland.¹⁸ An entry in the Register of the Privy Council refers to a complaint by the town clerk of Lauder, appropriately called Charles Lauder, to the effect that the magistrates and town council were unable to take the oath of allegiance to William and Mary because of the absence of Sir Archibald Cockburn. As a member of the Estates (Scottish Parliament) his presence was deemed essential.¹⁹

But I have so far omitted to mention anything of his personal details and I must rectify this. Sir Archibald was twice married; first, about 1659, to Marion Sinclair, daughter of John Sinclair, the younger, a branch of the family of Longformacus.²⁰ The Cockburns had four sons and two daughters. The eldest son, William, died when still very young. The second son, also named Archibald, became the heir but in a manner which is not altogether clear. In January, 1686, this son succeeded to the title and the estate although his father was still alive and in full control.²¹ The charter confirming the transfer reserved the liferent of all lands and

offices to the father. They were referred to, in official documents after this date, as Sir Archibald Cockburn of Langton, elder and younger respectively; a situation as confusing to later historians as it was to contemporary creditors, as will become apparent.

But to continue with the family details. Sir Archibald Cockburn, younger, became an advocate; a training which stood him in good stead until his death in 1702, some three years before his father. He was referred to, at that time, as 'a gentleman of quality and merit.'²² Thus it was the grandson of Sir Archibald, elder, who succeeded to the title as third baronet and the estate on the death of his grandfather. This rather highlights the peculiar situation which existed between the elder and younger Sir Archibald; a situation which was very much to their advantage.

If I may be permitted to jump forward a number of years, this grandson died in 1710 without marrying and it was our Archibald's third son, Alexander, who became the fourth Baronet of Langton. His fourth son emigrated to Jamaica and started a branch of the family there.

His second marriage, in 1689, was to Anna, a daughter of Sir Thomas Stewart of Coltness. They had three sons, all of whom predeceased their father. The youngest of these is said to have been 'playing with several dice in his mouth when one went down his windpipe and proved his instant death.'²³ This only goes to show that the dangers to children in the home in those days were very similar to those which exist today. I wonder whose dice they were?

It was about 1690, due to undertaking improvements on his estate far beyond his means, that Sir Archibald fell deeply into debt. He had borrowed extensively from his friends and relatives; not least from his neighbour and kinsman mentioned previously, Sir James Cockburn of Cockburn. Sir James, with more generosity than prudence, assisted his friend with the result that he, also, became bankrupt. If I may be allowed to digress yet again, these loans to Sir Archibald along with other huge debts which Sir James had incurred eventually resulted in Sir James selling the lands of Duns in 1696. William Hay of Drumelzier (a descendant of whom still lives in Duns Castle) bought Duns and Crumstane from the creditors of Sir James Cockburn for £19,000 sterling.²⁴

Now to return to the affairs of Langton. It was when his fortunes were at their lowest that he was able best to demon-

strate his resourcefulness. His creditors now began to pursue him through the courts. He outwitted them by appealing to the Privy Council, in 1690, for protection which was granted for a period of three years, provided that he paid the yearly interest on his debts. He argued his case so persuasively that the Council decided 'such is the condition of his estate by reason of the singular improvements he hath made and that it cannot be better managed than by allowing him the administration and management of it'.²⁵

He contrived to extend this protection to July, 1694, when he was again strongly pressed to settle his debts. The Court of Session ordered the estate to be leased out for a period of between three and seven years, unless a purchaser could be found; in which case it was to be sold.

The Court also instructed that the leasing was to be by public roup and the annual rent was to be set at 24,000 merks Scots (£2,000).^{26, 27}

However, Sir Archibald was not to be outdone and outbid all others by offering 30,000 merks if they would entrust him 'upon his word and promise'—which was accepted.²⁸ The indication is that he had wealthy and influential friends. Surprisingly, he managed for a short time to pay the rent and neither he, nor his possessions, nor his lands were seized. Some of his creditors did not like this arrangement, not surprisingly, and continued to press for settlement. He managed to pay some of his debts but the estate was eventually rented by a certain John Watson. Surprisingly, Sir Archibald was permitted to manage it.

The next few years saw a very confused state of affairs, especially for the creditors. In 1696, his son had to petition Parliament to obtain protection on the grounds that he was not responsible for his father's debts.²⁹ He was, of course, an advocate and was, naturally, well versed in the law. Legal arguments dragged on in the Court of Session in an attempt to decide whether the elder or younger Cockburn was responsible for his father's debts.²⁹ He was, of course, an advocate and was, naturally, well versed in the law. Legal arguments dragged on in the Court of Session in an attempt to decide whether the elder or younger Cockburn was responsible for paying the debts. The Court also thought it prudent to establish the true value of the estate and, in 1700, requested that a valuation should be made.³⁰

By this time the protection granted to him had expired. He

was, occasionally, confined to prison; or managed to obtain sanctuary in the precincts of the Abbey of Holyrood—a refuge for debtors. The space around the Church and Palace of Holyrood, enclosed by a boundary of some four miles, so we are told, was treated as a refuge for debtors from arrest. The right of protection from creditors had existed from the time of David I, the founder of the original Church of the Holy Rood.³¹

It is on record that Sir Archibald, always lucky, made his escape from the Tolbooth Jail in Edinburgh, on the night of 20th June, 1700, when the Edinburgh rabble broke into the building. This followed the somewhat over-enthusiastic celebrations, by certain sections of the populace, when news was received that a Spanish attack on the Scottish colony at Darien had been successfully repulsed. As well as breaking numerous windows in the town, the mob broke down the Tolbooth door by 'fire and other means' and set free all the prisoners.³²

In July of that year it was finally decided that the estate should be sold. In fact it was not sold until some fifty years later. On hearing this decision Sir Archibald, nothing daunted, applied to the Court of Session to be present when the estate was being valued. He again claimed that he was the most suitable person to demonstrate how it had been improved. However, their Lordships declared that, as he had lately escaped from the Tolbooth, he should be considered as still a prisoner and his request was not granted.³³

Sir Archibald does not seem to have worried about the damage to his reputation by being bankrupt. Indeed, it may have been a common occurrence at the time and accepted with resignation. However, this opinion was not held by everyone, even in those days, as illustrated below.

As was the custom of the time, Sir Archibald was tutor to, and exercised wardship over, a young girl—a distant relative—called Ann Cockburn. Her uncle, Lord Crossrig, considered that it was quite disgraceful that she should be under the influence of a 'broken man'. The noble lord, with some difficulty, managed to have the wardship transferred to himself.³⁴

During most of the 17th century, the Cockburns of Langton owned land at Simprim—'ten husbandlands in Sympring' (about 260 acres)—known as the Kirklands. A conspicuous local feature, to this day, is the barns at Simprim, buildings

of great length and originally three stories high. On the lintel over the doorway is carved the letters S.A.C. 1676. The initials are those of Sir Archibald Cockburn and it is quite in accordance with his 'improving' ideas of agriculture that he should build these large barns, or girnels, for the storage of grain.

The renowned Thomas Boston, who became minister of the Parish of Simprim in 1699, makes several references to Sir Archibald in his memoirs. Several comments illustrate the laird's thoughtfulness towards the minister and the church of which he was patron. On one occasion it was Sir Archibald's privilege to provide the customary ordination dinner for the new minister and members of the presbytery; as it was in the year 1699, Boston was doubtful if Sir Archibald would be capable, or even mindful, of providing such a repast. The minister, however, admitted to being pleasantly surprised to find that a 'decent entertainment' had been prepared in spite of the laird's financial predicament.³⁵

Mr Boston remarks, more than once, that the laird's difficulties made life hard for him also. Not surprisingly, he had some bother in obtaining payment of that part of his stipend which was due to be paid in cash—eighteen pounds Scots. The laird, however, had no intention of shirking his responsibilities as patron and principal heritor and eventually sent his factor to pay the sum due, and to promise that the remainder of the stipend, payable in bere (barley) and oats, would be available as soon as it could be collected together.³⁶

Mr Boston was caused additional worry by the delay in the construction of the new manse which was being built for him by the estate tradesmen of Langton. Delays in the completion of new houses, of course, are not unknown at the present time! The worthy minister refers to Sir Archibald's predicament in the words 'Langton's Estate going then from hand to hand.'³⁷

Sir Archibald died in the Abbey Sanctuary on 28th June, 1705, and was buried in the family burial ground at Langton and not in a pauper's grave as might have been expected.^{38, 39}

We have reviewed his life. But how can we sum it all up and arrive at a fair conclusion! The results of his enterprises were ill-fated and financially disastrous; he left debts to his successors which, in 1758,—some fifty years later—led to the sale of all his lands. Whether this should be attributed to

misfortune or extravagance is now difficult to find out. He has been called 'the reckless waster of his ancestral estates' by one insensitive chronicler. It would, perhaps, be kinder to assume that his efforts to introduce improvements were badly implemented by his workers and agents: new methods were very likely scorned in those days. If an epitaph is required it must surely be 'He was in advance of his Age.'

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A NOTE ON A NEWLY-DISCOVERED PORTRAIT OF JOHN MACKAY WILSON

E. Bowes

Hanging in the Reserve Collection of Berwick Museum and Art Gallery is a striking, if sombre, bust-length portrait of an elegant young man dressed in a dark jacket and fawn waistcoat (Fig. 1).¹

At present the picture is in need of restoration. The featureless brown background suffers from extensive bituminous craquelure; disconcerting drying cracks have developed in the costume; and the sitter's face is marked by yellow-brown splashes and childish scribbles in pencil on top of the discoloured varnish coating.² It is scarcely surprising that no trace of the artist's signature is visible, but a brief entry in the Museum archives records that the picture was painted by 'James Sinclair' in 1893. Who, then, was James Sinclair, and what is the identity of his refined subject with his rather long face, cupid's bow mouth, and extravagant head of hair?

Unless the picture is a copy, the late nineteenth century date is patently contradicted by the evidence of the sitter's costume. A date in the second quarter of the century would seem more acceptable and, sure enough, the catalogue of the annual exhibition of the Royal Scottish Academy in Edinburgh in 1830 reveals that two pictures were exhibited in that year by James Sinclair of Berwick. Pigot's *Directory* confirms that a portrait painter with this name was living at 4 Silver Street in 1834—and further records that he was in business as a House and Sign Painter.

However, such publications can provide only the briefest information about an individual's interests and movements. Far more can be learned from contemporary newspapers and, in this instance, the key to the mystery surrounding the anonymous portrait lies within copies of *The Berwick Advertiser* published during the brief editorship of John Mackay Wilson—from 1832 until his death in October, 1835.

In an earlier issue of the Club's *History* it was noted that Wilson "used his position to give strong support of Earl Grey and the cause of Reform."³ But, in addition to this, before beginning the separate weekly publication of what became his *Border Tales* on 8th November, 1834, he gave *The Advertiser* a more pronounced literary bias. Before his return to Berwick, specimens of his verse had been published in the newspaper, together with occasional reports of his lectures in Manchester and elsewhere, but after his assumption of the editorship, far more space came to be devoted to poetry and literary criticism. Sometimes the latter would take the form of a single, long essay by Wilson but, on other occasions, the piece might

be couched in the form of an entertaining discussion between three enthusiasts with mildly differing views—Mr. Smart, Mr. Grant (a genial figure who speaks intermittently in Border dialect) and the editor himself.

However, Wilson was careful not to neglect the other Arts and he would sometimes record the latest achievements of painters within the town. Frequently he merely extracted paragraphs from other newspapers such as *The Tyne Mercury*, but on 6th April, 1833, the following appeared: "VIEW OF BERWICK, &C—We have just seen a spirited and excellent view of Berwick, painted by our townsman, Mr. Sinclair. The view is taken from near the colliery on Sunnyside Hill, and includes the whole of Berwick, the bridge, Tweedmouth, and part of Spittal; it also embraces the pier, the new road to beyond Spring gardens, and the entire landscape is most accurately painted. It is by far the most complete view of Berwick we have seen. The perspective, in particular, is excellent, and the river beautifully managed. There is an agreeable warmth about the colouring, and the whole painting is highly creditable to the promising talents of the young and industrious artist. We would recommend him to have it lithographed."

Unfortunately, Sinclair does not seem to have followed Wilson's advice to have prints made—and his splendid panorama has disappeared without trace. But so enthusiastic is the tone of this 'puff' that one is at once led to suspect that there may have been some form of link between the writer and the painter,⁴ and this is confirmed only a few months later for, on 21st September, in "A Three Handed Crack," Mr. Smart, Mr. Grant and the Editor of *The Berwick Advertiser* engage in "A Conversation on Books—Engravings—The Arts—Berwick Artists, &c." T. S. Good, we learn, is still the acknowledged doyen of the artistic community in the town. "A more beautiful colourist than Good is not found among modern painters" we are told. One painting in particular, *Reading and Listening* (which features a young man with an abundant head of hair reading aloud from a newspaper to an elderly individual who rests his hands upon a stick) is singled out for praise—as, indeed, it had been eighteen months earlier when Wilson transcribed the following lines from *The Spectator* into the short-lived *Border Magazine*: "the expression both of reader and listener is perfectly real. It is like seeing the persons in a camera—which we think the artist employs, judging from his peculiar style."⁵ But, by 1833, "Good, by the mere force of his talents, has long ago triumphed over every adversity, and can now paint to please himself." Instead, his former pupil, William Henderson, is now "rapidly attaining eminence, and Sinclair is industriously following hard in their wake." Indeed, Sinclair has just completed two portraits—

Of one—a portrait of the Town Clerk—Wilson is keen to speak at some length. "A more faithful likeness I have never seen," he



Fig. 1. John Mackay Wilson (1804-1835) by James Sinclair, 1833. Oil on canvas (30 x 25in.—761 x 635 mm.).

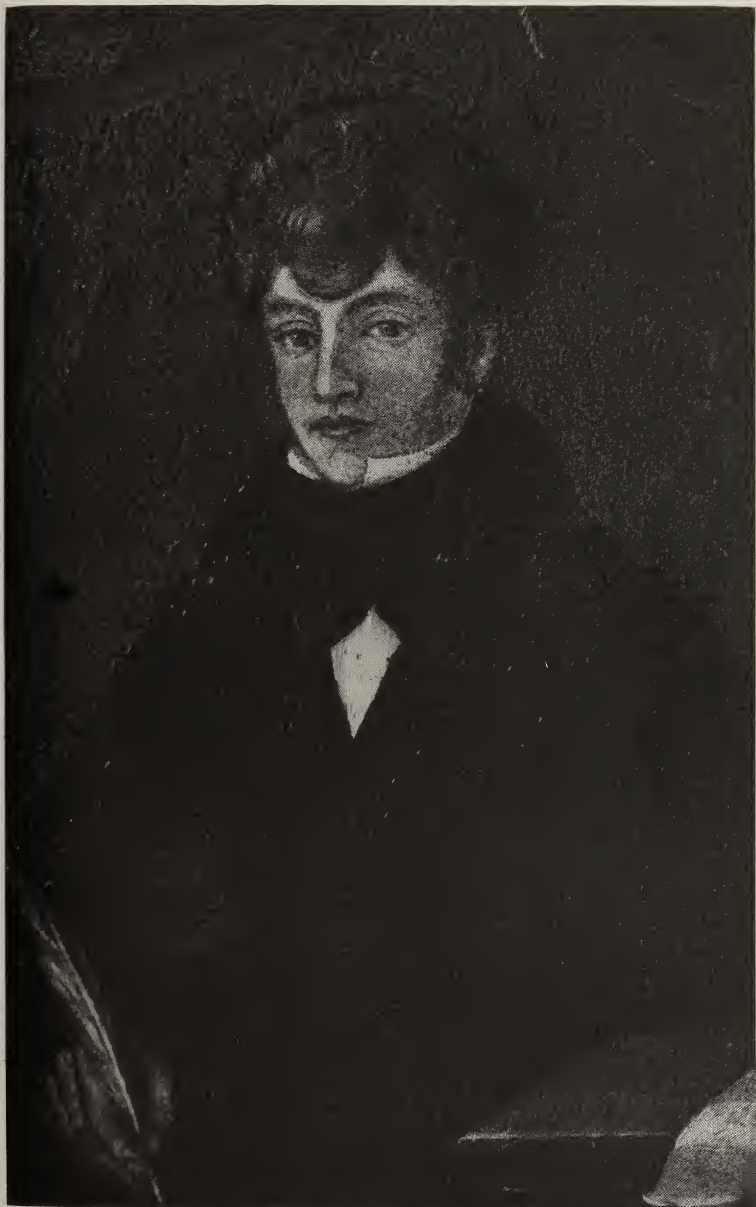


Fig. 2. John Mackay Wilson by an unknown artist, 1831 (?). Oil on millboard ($11\frac{3}{4} \times 10\frac{1}{8}$ in.— 299×267 mm.). Scottish National Portrait Gallery (Reproduced by courtesy of the Gallery).

avows. "Sinclair loves his profession for its own sake,—his whole soul is in his art,—his perseverance is also equal to his enthusiasm, and his success is certain. Within the last nine months his improvement has been wonderful, not only as a colourist, in which lay his greatest deficiency, but in the character and the strong individuality which he infuses into his portraits; and in his latter efforts there is a freedom of touch, united with a smoothness and a clearness of colouring which had no trace in his earlier productions."

But the Editor is teased about the second portrait by Mr. Grant: "Weel, sir, and will your modesty no allow you to confess that within these last few days he has taken another portrait, which I am certain ye think more of than even of that ye hae been speaking of?"

In reply, Wilson bashfully admits that the execution of this painting "does honour to the artist." But he will not be drawn further: "Of the portrait you refer to let others judge."

Without doubt, then, the painting which now hangs in Berwick Museum is James Sinclair's *Portrait of John MacKay Wilson* and the lamentable little likeness on millboard so described in the catalogue of the Scottish National Portrait Gallery (Cat. No. 1300) must be by another, unknown hand (Fig. 2).⁶ The young man in Good's *Reading and Listening* may be a third likeness of Wilson.

Sinclair's portrait, produced in mid-1833, records Wilson's appearance at an interesting time in his career. He was then engaged on writing and securing subscriptions for *The Enthusiast, or Dreams and Realities, A Metrical Tale in Two Cantos, With Other Poems: And a Preliminary Chapter on Poetry*. This was published, after some delay, on 28th December of the same year.⁷ Eleven months later, he began publication of *The Border Tales* but, interestingly, though Sinclair was given no acknowledgement, it was *his* portrait which was to serve as the prototype for the well known likeness of Wilson, published posthumously as an engraving by J. Gellatly in 1837 and used as the Frontispiece in Volume I of the *Tales*. Only, in the light of the phenomenal success of the *Tales*, a single important modification was deemed necessary—the inclusion of a distant Border Keep, silhouetted against the sky, in place of Sinclair's plain brown background.

And what of James Sinclair himself—the young enthusiast whose very soul lay in his art? Sadly, little more is heard of him, but we can be sure that the dreams of artistic success fostered by his eloquent sitter soon succumbed to the mundane realities of life, and especially the need to earn a steady income. He continued as a local business man and became a keen entrepreneur, it seems, operating first of all as a house painter and later as a ship's chandler—at least until the coming of the railway in 1846 when he disposed of an immense quantity of his stock. Thereafter he fades from view.

NOTES

1. Catalogue number BERMG 1572. Oil on Canvas. 30 in x 25 in (761 mm x 635

mm).

2. The painting appears never to have been restored. The badly 'cockled' canvas has a fairly fine, plain weave and is still attached to its rather crude, original wooden strainer. But the back of the canvas is stained red-brown and bears smudges of paint and other material. It is tempting to speculate that Sinclair has used a piece of sail cloth.

3. HBNC, Vol. XXXIX, Part 3, 1973, p. 184.

4. It may be only a coincidence that the lawyer who acted as the executor of Wilson's estate was named Sinclair.

5. *The Border Magazine*, Vol. 1, 1832, p. 242. Good's picture was painted in 1832 and exhibited at the British Institution in that year (282). In the collection of the second Lord Northwick it came to be known as *The Village Politician*. It measures 13½ in x 16¼ in. In 1966 it was with an art dealer in London. It is not known whether Good used a camera obscura or some other form of mechanical device to assist with his paintings.

6. It must be admitted that the Edinburgh portrait has an excellent provenance. It was acquired by the Gallery in 1936 from a distant descendant of the poet who stated that it was painted by Sinclair in 1831. But, in the years following Wilson's death, confusion seems to have arisen within the family regarding its authorship—unless it represents a very juvenile work by Sinclair which seems unlikely. The provenance of the Berwick picture is unknown; even the date when it entered the collection is unrecorded.

7. Notices of the imminent publication of *The Enthusiast* (price five shillings) appeared in *The Advertiser* towards the end of 1833, together with copious "Testimonials of the Press." (*The Spectator* judged that "As a Tale writer, Mr. J. M. W. bears away the bell from all other writers in the Annuals.") On 6th January, 1834, Wilson sent a copy of the book to W. A. Mitchell (1796-1845), the Editor of *The Tyne Mercury* in Newcastle, reminding him "that it was in the columns of the Mercury eleven or twelve years ago that I first appeared before the public as a writer of verses." (Letter, private collection.)

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THE MARINE ALGAE OF ALNMOUTH: A CENTURY OF STUDY

F. G. Hardy

Department of Biology, University of
Newcastle upon Tyne

The later years of the nineteenth century were very much the heyday of the amateur naturalist and a number of very detailed surveys of particular localities were carried out at that time which have since proved to be of great interest and use to subsequent generations.

On the Northumberland coast Andrew Amory studied the marine flora at Alnmouth (between Seaton Point (NU 2612) to the north, and Birling Carrs (NU 2507) to the south) and his records, of 106 species, were published in this journal (Amory, 1884, 1885, 1887). These records are listed in Table 1. In addition, his record for *Monostroma grevillei* (dating from April 1886) was published in a check-list for the British marine algae (Batters, 1902). Surprisingly, some very common species, such as *Hildenbrandia rubra*, *Laminaria hyperborea* and *Fucus spiralis*, are not recorded by Amory.

By chance, his herbarium – a volume containing 176 specimens, many in beautiful condition and representing 104 species (see Table 1) – was rediscovered recently by a member of his family (and is now in the Hancock Museum, Newcastle upon Tyne). The only species which Amory lists in his papers which are not represented in his herbarium are *Petrocelis hennedyi* and *Phymatolithon polymorphum*. (The record for *Monostroma grevillei* cited by Batters is not included in either Amory's papers or his herbarium). The existence of such a comprehensive collection of records for a specific area, dating from exactly a century ago, inspired this present study to determine what records exist for Alnmouth for the past hundred years.

At first sight Alnmouth would seem to be an unlikely area in which to find a rich algal flora, there being an extensive stretch of sandy beach from which, drift specimens apart, seaweeds are absent. Phycological interest is concentrated on two locations: Marden Rocks (NU 2611, about half a mile north of the village) and a salt marsh to the south of the river estuary. Perhaps for this reason the area has been largely ignored since the time of Amory's survey.

One of the most prominent phycologists at the end of last century was Edward Batters, a barrister. He made extensive studies of the algal flora of Berwick upon Tweed, and his check-list for that area was published in this journal (Batters, 1889). New or critical species of British marine algae were the subject of a number of his papers, and in one of these (Batters, 1900) he included a record for the

filamentous red alga *Audouinella endozoica* which George Brady had found at Alnmouth on the bryozoan *Alcyonidium hirsutum*.

Batters was particularly good at utilising previous records, and his check-list of the British marine algae (Batters, 1902), in which the localities of individual species are given, is especially useful. The records he cites for Alnmouth are, presumably, based on those of Amory. In general, the commonest species are described as coming from particular counties, rather than from specific localities, although one or two common species are more exactly located (for example, *Laminaria hyperborea* is recorded from Alnmouth, where it was missed by Amory). The records for Alnmouth which Batters cites in his papers are listed in Table 1.

Published records for Alnmouth during the twentieth century are so sparse as to be inconsequential. As part of a field meeting in August 1959, members of the British Phycological Society visited the area and recorded 6(!) species. Steve Mercer, visiting Marden Rocks as part of a survey of the distribution of *Himanthalia elongata* on the north-east coast, recorded the presence of *Halidrys siliquosa* (Mercer, 1976).

The study of the marine algae of Alnmouth has been adopted by the Borders region of the Marine Conservation Society as one of its projects, and the records of the species found on a field meeting held in June 1986 are given in Table 1. In addition to the species recorded here a number of encrusting coralline red algae were found which were not identified to the species level. Further field meetings at Alnmouth are envisaged.

The number of species recorded in the nineteenth and twentieth centuries are given in Table 2, from which it can be seen that, from the total of 120 species recorded from the area, only 39 have been seen so far this century (although 109 have been recorded in Northumberland: see Table 1 and Hardy, 1985). Interestingly, 7 of these 39 species were not recorded from Alnmouth in the nineteenth century. This curious dearth of records most probably reflects the extent to which this locality has been neglected by phycologists during the present century rather than being indicative of a massive loss of species from this relatively unspoiled and unpolluted area.

Throughout this paper the nomenclature follows that of the check-list of Parke and Dixon (1976).

TABLE 1:

THE MARINE ALGAE OF ALNMOUTH
FROM SEATON POINT TO BIRLING CARRS

1. Amory published records (Amory, 1884, 1885, 1887).
2. Amory herbarium.
3. Batters published records (Batters, 1900, 1902).
4. Twentieth century published records (Jones, 1960; Mercer, 1976).
5. Marine Conservation Society records, 28 June 1986 (Marden Rocks).
6. Twentieth century Northumberland records (Hardy, 1985).

Species	1	2	3	4	5	6
<i>Cyanophyta</i>						
<i>Calothrix crustacea</i>	*	*				*
<i>Rhodophyta</i>						
<i>Audouinella endozaica</i>			*			
<i>Audouinella floridula</i>	*	*				*
<i>Audouinella virgatula</i>	*	*	*			*
<i>Gelidium pusillum</i>			*			*
<i>Gelidium sesquipedale</i>	*	*				
<i>Bonnemaisonia asparagoides</i>	*	*	*			*
<i>Furcellaria lumbricalis</i>	*	*			*	*
<i>Cystoclonium purpureum</i>	*	*	*			*
<i>Plocamium cartilagineum</i>	*	*				*
<i>Gracilaria verrucosa</i>	*	*	*			*
<i>Ahnfeltia plicata</i>	*	*				*
<i>Phyllophora crispa</i>	*	*	*			*
<i>Phyllophora pseudoceranoides</i>	*	*	*			*
<i>Chondrus crispus</i>	*	*	*		*	*
<i>Gigartina stellata</i>	*	*			*	*
<i>Petrocelis hennedyi</i>	*					
<i>Corallina officinalis</i>	*	*			*	*
<i>Dermatolithon pustulatum</i>	*	*				*
<i>Lithophyllum incrustans</i>					*	*
<i>Phymatolithon lenormandii</i>					*	*
<i>Phymatolithon polymorphum</i>	*					*
<i>Dilsea carnosa</i>	*	*				*
<i>Dumontia incrassata</i>	*	*			*	*
<i>Gloiosiphonia capillaris</i>	*	*	*			
<i>Callophyllis laciniata</i>	*	*	*			*
<i>Hildenbrandia rubra</i>					*	*
<i>Palmaria palmata</i>	*	*			*	*
<i>Lomentaria articulata</i>	*	*	*		*	*
<i>Lomentaria clavellata</i>	*	*	*			*
<i>Callithamnion hookeri</i>	*	*	*			*
<i>Callithamnion sepositum</i>	*	*	*			*
<i>Ceramium diaphanum</i>	*	*				
<i>Ceramium rubrum</i>	*	*			*	*
<i>Ceramium shuttleworthianum</i>	*	*				*
<i>Griffithsia flosculosa</i>	*	*				*

Species	1	2	3	4	5	6
<i>Plumaria elegans</i>	*	*				*
<i>Ptilota plumosa</i>	*	*	*			*
<i>Spermothamnion repens</i>	*	*				*
<i>Cryptopleura ramosa</i>	*	*				*
<i>Delesseria sanguinea</i>	*	*	*		*	*
<i>Hypoglossum woodwardii</i>	*	*				*
<i>Membranoptera alata</i>	*	*				*
<i>Nitophyllum punctatum</i>	*	*	*			*
<i>Phycodrys rubens</i>	*	*				*
<i>Heterosiphonia plumosa</i>	*	*				*
<i>Brongniartella byssoides</i>	*	*	*			*
<i>Laurencia hybrida</i>	*	*			*	*
<i>Laurencia pinnatifida</i>	*	*			*	*
<i>Odonthalia dentata</i>	*	*	*			*
<i>Polysiphonia brodiaei</i>	*	*	*			*
<i>Polysiphonia elongata</i>	*	*				*
<i>Polysiphonia fibrata</i>	*	*				
<i>Polysiphonia lanosa</i>	*	*				*
<i>Polysiphonia nigra</i>	*	*				*
<i>Polysiphonia nigrescens</i>	*	*			*	*
<i>Polysiphonia urceolata</i>	*	*	*			*
<i>Pterosiphonia parasitica</i>	*	*	*			*
<i>Rhomomela confervoides</i>	*	*			*	*
<i>Rhomomela lycopodioides</i>	*	*	*			*
<i>Porphyra leucosticta</i>	*	*	*			*
<i>Porphyra linearis</i>			*			*
<i>Porphyra umbilicalis</i>	*	*	*		*	*
<i>Phaeophyta</i>						
<i>Ectocarpus fasciculatus</i>	*	*	*			*
<i>Ectocarpus siliculosus</i>	*	*	*		*	*
<i>Giffordia granulosa</i>	*	*	*			*
<i>Laminariocolax tomentosoides</i>	*	*				*
<i>Pilayella littoralis</i>	*	*	*			*
<i>Spongonema tomentosum</i>			*			*
<i>Elachista fucicola</i>	*	*	*		*	*
<i>Leathesia difformis</i>	*	*	*		*	*
<i>Chordaria flagelliformis</i>	*	*	*			*
<i>Eudesme virescens</i>	*	*	*			*
<i>Mesogloia vermiculata</i>				*		*
<i>Isthmoplea sphaerophora</i>	*	*	*			
<i>Myriotrichia clavaeformis</i>	*	*	*			*
<i>Myriotrichia filiformis</i>	*	*	*			
<i>Asperococcus fistulosus</i>	*	*	*			*
<i>Litosiphon pusillus</i>	*	*	*			*
<i>Punctaria plantaginea</i>	*	*	*			
<i>Dictyosiphon foeniculaceus</i>	*	*	*			*
<i>Petalonia fascia</i>	*	*	*		*	*
<i>Scytosiphon lomentaria</i>	*	*	*	*	*	*

Species	1	2	3	4	5	6
<i>Desmarestia aculeata</i>	*	*	*			*
<i>Desmarestia ligulata</i>	*	*	*			*
<i>Desmarestia viridis</i>	*	*	*		*	*
<i>Chorda filum</i>	*	*	*	*		*
<i>Laminaria digitata</i>	*	*	*		*	*
<i>Laminaria hyperborea</i>			*		*	*
<i>Laminaria saccharina</i>	*	*	*		*	*
<i>Alaria esculenta</i>	*	*	*			*
<i>Sphacelaria cirrosa</i>	*	*	*			*
<i>Sphacelaria plumosa</i>	*	*	*			*
<i>Sphacelaria radicans</i>	*	*	*			*
<i>Halopteris scoparia</i>				*		*
<i>Cladostephus spongiosus</i>	*	*	*			*
<i>Dictyota dichotoma</i>	*	*	*			*
<i>Ascophyllum nodosum</i>	*	*				*
<i>Fucus ceranoides</i>				*		*
<i>Fucus serratus</i>	*	*			*	*
<i>Fucus spiralis</i>					*	*
<i>Fucus vesiculosus</i>	*	*			*	*
<i>Pelvetia canaliculata</i>	*	*				*
<i>Himanthalia elongata</i>	*	*				*
<i>Halidrys siliquosa</i>	*	*		*	*	*
<i>Chlorophyta</i>						
<i>Monostroma grevillei</i>			*			*
<i>Spongomorpha aeruginosa</i>	*	*			*	*
<i>Spongomorpha arcta</i>	*	*				*
<i>Enteromorpha clathrata</i>	*	*				
<i>Enteromorpha compressa</i>	*	*	*			*
<i>Enteromorpha intestinalis</i>	*	*		*	*	*
<i>Enteromorpha linza</i>	*	*				*
<i>Ulva lactuca</i>	*	*			*	*
<i>Chaetomorpha capillaris</i>	*	*				*
<i>Chaetomorpha linum</i>	*	*	*			*
<i>Chaetomorpha melagonium</i>	*	*			*	*
<i>Cladophora laetevirens</i>	*	*				
<i>Cladophora rupestris</i>	*	*			*	*
<i>Cladophora sericea</i>			*			*
<i>Bryopsis plumosa</i>	*	*	*			*

TABLE 2: CHANGES IN THE MARINE ALGAL FLORA
OF ALNMOUTH, 1884-1986

	<i>Amory</i>	<i>Batters</i>	<i>20th century</i>	<i>Total</i>
Cyanophyta	1	0	0	1
Rhodophyta	56	27	17	62
Phaeophyta	36	31	17	42
Chlorophyta	14	5	5	15
	<u>107</u>	<u>63</u>	<u>39</u>	<u>120</u>

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THE FOSSIL FLORA OF BERWICKSHIRE AND VICINAGE

Albert G. Long

Berwickshire and the neighbouring counties of Northumberland and East Lothian have had a long and important connection with palaeobotany. This connection was reviewed in two articles written for the Club's *History* (Long, 1959, 1960). In these two articles I mentioned in particular Henry Witham (1779-1844) and Robert Kidston (1852-1924). Both collected in Berwickshire and their work was seminal. The purpose of this article is to try and bring these two previous articles up-to-date and summarize results.

Witham used techniques of cutting and rock sectioning developed in Edinburgh and thereby described details of internal plant structure. Such methods led up to modern petrological sectioning. From this was developed the "peel" technique using cellulose acetate and acetone, which superseded Walton's slower method using a solution that set on drying to produce the film. Such "peel" sections made as transfers from a smooth surface etched in dilute hydrochloric acid made it possible for amateurs to prepare serial sections easily. Thus from one block found near Hutton Mill by the Whitadder I was able to make over 900 serial peel sections containing important type material using only carborundum, elbow grease, water and perseverance!

The major geological formations represented in Berwickshire are the Ordovician, Silurian, Devonian and Carboniferous. It is in the Lower Carboniferous period (Cementstone Group), 300-340 million years old, that the most interesting plant fossils have been found. These are known as petrifications or permineralizations because the preserving mineral matter has penetrated the plant tissues to a greater or lesser degree and thereby preserved the plant cell walls. In some exceptional fossils even contents of cells are present and in fossil seeds the archegonia (female organs) and microspores (comparable to primitive pollen grains) are present.

At that time in geological history there was much volcanic activity especially in the Kelso area and in the coastal region near North Berwick and in Fife, as is witnessed by the Bass Rock—a volcanic plug. Volcanic vents and ashes are well known, e.g., near Tantallon and Gullane, while on the Berwickshire coast at Cove and Burnmouth the lowest beds in the Cementstone Group are exposed in close proximity to the Upper Old Red Sandstone below. The junction is conformable, i.e., there is no sign of a time break in the rock sequence.

Similarly in the valley of the River Whitadder there is a region of passage beds between the two formations in the river bed above Preston Bridge, consisting of stratified ashes containing unidenti-

fied primitive seeds with slender stalks almost Cordaitan in appearance along with other poorly preserved plant fragments.

Last century Hugh Miller obtained by gift a compressed specimen, virtually only an impression lacking carbon, of the fern-like frond of *Archaeopteris hibernica*. This was said to come from Prestonhaugh and was figured under the name *Cyclopterus Hibernicus* in Lecture Eleventh—"On the less known fossil floras of Scotland", given before the Geological Section of the British Association, at Glasgow in September, 1855, and later published in his book: 'The Testimony of the Rocks'. Probably the site of origin was at the Old Red Sandstone scaur on the Whitadder right bank below Cockburn Bridge and on the big curve near Baramill Plantation. Here I have found large stems with longitudinal ribs but no fronds by which they could be identified with certainty. *Archaeopteris* is now classed as a progymnosperm and is considered identical with *Callixylon* found petrified as woody stems in North America. We know that it was a spore plant but very close to some primitive seed plants. How exciting it would be to find it in a petrified state in the Berwickshire rocks!

At the present time there are two major groups of living seed plants, gymnosperms and angiosperms. The gymnosperms have naked seeds not enclosed in an ovary but often protected between cone scales as in the Scots Pine. The angiosperms have enclosed seeds developed from ovules borne inside a carpel or section of the flower ovary. These are our chief food plants, vital to human life. Concerning these groups there is a great enigma, viz., their palaeobotanical origin or fossil ancestry. It was formerly thought that they could have descended from ferns but these are now considered to have been an independent group by a different line of descent.

From Preston Bridge to the Tweed opposite East Ord the river Whitadder (or White Water) repeatedly cuts some of the lowest beds of the Cementstones. These very rarely contain any marine fossils though I have seen *Orthoceras* at West Blanterne. The Cementstone Group consists mainly of shales (consolidated fine mud), sandstones (composed of sand grains carried in flood water), and layers of Cementstone, a muddy limestone composed of calcium and magnesium carbonates. It seems to have been precipitated from a solution by evaporation but shows little or no stratification and fractures at all angles. Doubtless the mineral matter came from ash of volcanic origin. This ash could have fallen over a wide area and then been dissolved in rivers, lakes or lagoons possibly at no great distance from the sea.

In the Tweed area up to the region of Kelso, and in the Blackadder below Greenlaw, as in the Langton Burn above Gavinton, Cementstone rocks occur, which are all possible sites of fossil plants. At one place near the Duns Golf Course volcanic ashes, similar to

those in the bed of the Whitadder above Preston Bridge are exposed.

One of my favourite modes of collecting has been on shingle beds for which the Whitadder has proved more productive than the Tweed and Blackadder, because of its brisker flow and its numerous twists and turns in close proximity to the Upper Old Red Sandstone.

In the Tweed and Blackadder the different rate and depth of flow means that when shingle is exposed in dry spells the boulders are coated with a film of mud and algae and each must be chipped with a hammer to determine its character and contents. In the Whitadder, especially early in the year one can wade in the shallower water and see the boulders more clearly. It has been my custom to carry a miner's pick and turn over the boulders to see their cleaner undersides. By working upstream from where a fossiliferous block was located it was possible to find the very productive layer between West Blanterne and Edrom. This contained very large irregular limestone concretions in shale, resting lower down the river on sandstone. I found the best method was to use a crow-bar and then break the blocks with a sledge hammer, as entire blocks were too heavy to carry either to Edrom Mains or West Blanterne Farms. The next stage was to transport them to Newcastle and cut them into centimetre-thick slices on a slab saw at the Hancock Museum. This was rather laborious dirty work using paraffin and flushing oil as lubricant. After washing the slices in detergent they were left overnight in a hot air oven to remove any remaining oil and then examined with the aid of dilute acid. Any seeds, stems or fronds so located could then be further sectioned by serial "peels", using vernier calipers to measure the thickness of the slices. All the specimens were fragmentary, as if they had been washed into muddy water partially charged with lime salts.

One of the most productive blocks was found on shingle above Hutton Mill, on the Whitadder left bank higher up than the old weir wall. This was in 1957 but now (1987) the shingle is overgrown. The two great floods in 1948 and 1956 left much shingle in their wake and the necessary bulldozing to repair banks also exposed fossil material. I came to Berwickshire as a teacher in 1945 without any previous knowledge of its interesting fossil flora. Today, as a result of the diminished flow of water, vegetation has encroached over much shingle exposed by former floods.

The flood of 1948 was indeed a terrible event and it was a wonder there was no loss of human life. The house in the angle between the Whitadder and Blackadder above the junction was submerged up to the roof where I believe inhabitants took refuge in the beam of a light shone from a road near by. Later I surmised that a bulldozer had been used to clear the bed of the Blackadder a short distance above the bridge as I found a heap of flattened concretions near the

field fence opposite Allanbank Mill Farm. These contained *Lepidodendron* sp., *Lyginorachis arberi*, *Stauropteris berwickense*, and the seed of *Genomosperma latens*. I was reminded of the mysterious *Anabathra Pulcherrima* of Witham, recorded from a sandstone quarry at Allanbank Mill which was later filled up. Recently new evidence regarding this fossil plant has been published; eleven slides of the holotype material were purchased by the British Museum (Natural History) as part of the Nicol Collection in 1867. These and others have been re-examined and figured by H. L. Pearson (Pearson, 1986). The conclusion reached is that *Anabathra pulcherrima* Witham 1833 is the same as *Paralycopodites brevifolius* (Williamson) DiMichiele, best known at Pettycur, Fife, and formerly thought to be a *Lepidodendron* or *Lepidophloios*, characterised by its attached leaves.

At the time of the 1948 flood I was living at Preston Schoolhouse and saw the extent of the damage at Cumledge Blanket Mill. Huge carding machines had been shifted from their sites. I helped to clean out two cottages and remember a wall clock in which the pendulum had stopped when the water had risen about six feet. I heard a man remark "We aye wanted water in the hoose but not like this". The "cauld and hungry hole" where I had fished for perch and trout below Preston Bridge had gone.

I knew nothing about Cementstone fossil plants then and it was not until Peter D. W. Barnard wrote from Birkbeck College, London, in February 1957, that I discovered what an interesting research subject lay close at hand. By then I was living at Gavinton and my first fossil finds were at Hanna's Bridge on the Langton Burn. This site had first been discovered by William Stevenson of Duns and later visited by Robert Kidston and Arthur Macconachie of the Geological Survey. The most interesting fossils found at Hanna's Bridge were the primitive seeds first described by Dr Mary Calder from slides in the Kidston Collection at Glasgow University. I was greatly encouraged and helped by Professor John Walton and, under his guidance, re-named the seeds *Genomosperma kidstonii* and *G. latens*. The name *Genomosperma* was suggested by the late Charles Taylor who was the Classics master at the Berwickshire High School. These seeds are of importance in that they support the theory of the origin of the seed integument from sterile primitive segments known as telomes. Other interesting finds at Hanna's Bridge were primitive species of plants known as *Cladoxylon* and *Clepsydropsis*. These species had never been discovered in British rocks before; they were first found in Saalfeld, East Germany, about the middle of last century by Richter and Unger. Since then they have been discovered in the Black Mountain region of France and studied by P. Bertrand and more recently by Jean Galtier of Montpellier. The latter has described a new species of *Clepsydropsis* and named it *C. parvula* because of its small size. (Galtier 1966, 1970). It is of interest that this fossil has turned up in

the site near West Blanerne, *in situ* in the bed of the Whitadder. Sections are mounted on slides 7098-7105 and 9250-9272 of my collection in the Hancock Museum. They have not yet been described. At the same Whitadder site, I also found many specimens of *Clepsydropsis antiqua* Unger. On two of these, respectively Nos. 22 and 4, there are roots (Slides 10367-77, 10278-415). Unfortunately we have never found the stem of this primitive fern. The axes discovered are called phyllophores being intermediate between a stem and a leaf stalk. In *C. antiqua* the pinnae alternate singly left and right but in *C. parvula* they are in alternating pairs, more like other primitive ferns, e.g., *Etapteris*.

Stems and branches of the primitive fern-like plant *Cladoxylon* have been found at many different sites in Berwickshire and once at Oxroad bay near Tantallon Castle in East Lothian. Since *Cladoxylon* has small branches with a vascular bundle resembling a small *Clepsydropsis* there may be some relationship. Again, it was in Berwickshire rocks that a specimen of *Cladoxylon* (*C. kidstoni* Solms-Laubach, 1910) was first found in Britain. In my opinion *Cladoxylon* is probably more closely related to primitive so-called ferns (spore plants) than to primitive seed-plants such as the pteridosperms. Berwickshire has also produced another very primitive fern-like plant *Stauropteris berwickensis* Long, 1966 and this is very widespread. At first I confused it with the species *S. burntislandica* found at Pettycur but when the sporangia were discovered at Burnmouth the distinction was realised. This is one of the fossil plants found in Langton Glen as well as the rare *Sphenophyllum insigne* Will., 1874. The material from this site was in loose blocks though in the left bank there is a peculiar yellowish rock layer not unlike the Carham limestone. The latter is a cherty magnesian limestone occurring near Carham in the bed of the Tweed low down in the Cementstone group. I have never seen it elsewhere so its occurrence in Langton Glen seems open to doubt.

Psalixochlaena berwickense Long, 1976 was also found at the West Blanerne site as well as in a loose block on shingle below Hutton Bridge after the 1956 flood. It has some puzzling features so that more specimens are needed before its classification can be settled with certainty.

As these discoveries of early fern-like plants sprang out of my first investigation of the blocks found by the Langton Burn to which I was directed by Peter D. W. Barnard I would like to pay tribute to the remarkable personal qualities which he showed. In his youth he had suffered an accident in the gymnasium at his school. The result was paralysis from the waist down so that for the rest of his life he had to use a wheel chair but learned to drive a car with hand controls. He came to Duns with his tutor Dr K. Alvin and we visited the Whitadder and Crooked Burn. Single handed he drove his car through the Blue Stone Ford. Later we visited fossil sites at Oxroad

Bay and Dunbar. After taking his PhD he became a teacher, and later a lecturer at Reading University. While there he became interested in Mesozoic plants and carried out an excursion to collect from coal seams high up in the Elburz Mountains in Persia. Afterwards he married and was nobly supported by his wife Margaret up to his death on July 12, 1984.

Long (1976) relates events leading to a resumption of my palaeobotanical research while I was living at Gavinton, near Duns. It gives a list of papers published up to 1976. Two further papers are noted here: on the genus *Pitus* Witham (Long, 1978) and on the relationship of *Sphenopteris bifida* L. & H. to the seed genus *Hydrasperma* (Long, 1979).

Subsequent to retirement after 14 years spent at the Hancock Museum in Newcastle-upon-Tyne, I tried to complete the description of new material but found this difficult because of a lack of facilities and ill-health. Three papers were, nevertheless, completed: on *Oxroadopteris parvus* a small pteridosperm (Long, 1984); on *Oxroadia gracilis* Alvin, an example of a lycopod stem-base with 72 roots and 12 rhizophores, almost like a diminutive *Stigmaria*, one specimen showing ligules in broken leaf-bases (Long, 1986); a note on the cupule-carpel theory (Long, 1984). This last paper is admittedly no more than a speculative attempt pointing to a possible origin of the carpel in flowering plants. At present I have in press a paper summarizing 25 years of searching for specimens of *Eristophyton*. This enigmatic plant is of importance as it seems to combine features of the pteridosperms and cordaitean gymnosperms. I have concluded that it is most probably a pteridosperm.

For many years I have pondered the problem of the origin of angiosperms and their relationship to the Cordaiteae and conifers. To me this problem seemed to centre round the origin of the carpel and of the second (outer) integument of the ovule in angiosperms. Several times I have been forced by evidence to re-consider my views. Eventually I have come to think that the progenitors of angiosperms were unknown primitive pteridosperms possessing woody stems and that the second ovular integument must have been a modification of one or more adnated lobes of the cupule. The remainder of the cupule must have undergone basal fusion to become the carpel. As for the Cordaiteae I admit a lack of evidence but suspect that they had pteridosperm ancestors in the Lower Carboniferous. Seeds with a possible bilobed integument like that in certain pteridosperms occur in the ash beds above Preston Bridge. Short shoots modified to form cones may have been a feature concerned with a xerophytic environment in which certain early pteridosperms found themselves owing to climatic change brought about by continental drift or other geographic factors. Other genera of Lower Carboniferous age which might have relationship with the Cordaiteae are *Bilignea* and *Endoxylon* especially

the latter. *Bilignea* has been found at Burnmouth and Oxroad Bay but I have never seen *Endoxylon* in the Cementstone Group of Berwickshire and vicinage. However, a specimen in the Hancock Museum Dunn Collection seemed to agree with it and came from the Ridsdale shales from which ironstone nodules were formerly mined as iron ore.

Two other papers concerning the geology of Berwickshire by T. E. Smith should also be noted (Smith, 1967, 1968).

Since my retirement in 1980 important new investigations into the Cementstone flora have been carried out at Foulden (Crooked Burn) and at Oxroad Bay, as well as spore studies at various other sites. The Foulden investigation was a joint effort combining research into both the fossil flora and the fossil fauna and was published as a symposium of the Royal Society of Edinburgh, entitled "The Dinantian of Foulden, Berwickshire, Scotland": the section on flora is by Scott and Meyer-Berthaud (1985) and that on spores by Clayton (1986). Also Scott et al. (1984) give information on the Berwickshire fossil flora. Finally I should mention that the Cementstone microspores of the Tweed basin have been studied by Derek Robeson of Kelso and his studies were presented as an MSc thesis to the University of Sheffield in 1986.

Although my main collections of slides and blocks are in the Hancock Museum at Newcastle upon Tyne, and are not yet fully catalogued, I have endeavoured during my retirement to prepare a slide collection from duplicate "peels" for the Royal Museum of Scotland. Lists of the fossil plant specimens deposited, and of the localities where they were collected, are appended.

PALAEBOTANY SLIDES IN THE ROYAL MUSEUM OF SCOTLAND

A. G. Long

LIST OF SPECIES

Achlamydocarpon scoticum Long, 1968

Alcicornopteris convoluta Kidston, 1887

Amyelon sp. Will, 1874

Anasperma burnense Long, 1966 (synonymous with *Eurystoma burnense*).

Archaeocalamites radiatus (Brongniart, 1828) Stur, 1875

Bilignea sp. Kidston 1923

Buteoxylon gordonianum Barnard and Long, 1973

- Calamopsis* sp. Heer 1859 (the use by Solms Laubach 1896 was illegitimate)
Calathospermum fimbriatum Barnard, 1960
Camptosperma berniciense Long, 1961
Clepsydropsis antiqua Solms-Laubach, 1896
Cladoxylon waltoni Long, 1968

Deltasperma fouldenense Long, 1961
Dolichosperma pentagonum Long, 1975
Dolichosperma sexangulatum Long, 1961

Eccroustosperma langtonense Long, 1961
Eosperma oxroadense Barnard, 1959
Eristophyton beinertianum (Goeppert 1845) Zalesky, 1911
Eristophyton waltoni Lacey, 1953
Eurystoma angulare Long, 1960
Eurystoma burnense (Long, 1966) Long, 1975

Genomosperma latens Long, 1960
Genomosperma kidstoni (Calder, 1938)

Hierogramma sp. Unger 1856
Hydrasperma tenuis Long, 1961

Kalymma tuediana Calder, 1938

Lepidodendron calamopsoides Long, 1964
Lepidodendron brevifolium Williamson, 1872
Lepidostrobus sp. Brongniart 1828
Lyginorachis arberi Long, 1964
Lyginorachis brownii Calder, 1935
Lyginorachis papilio Kidston, 1923
Lyginorachis waltoni Calder, 1935
Lyginorachis whitadderensis Barnard and Long, 1975
Lyrasperma scotica (Calder, 1938) Long, 1960

Oxroadia gracilis Alvin, 1965
Oxroadopteris parvus Long, 1984

Pitus antiqua Witham, 1833
Pitus primaeva Witham, 1833
Psalixochlaena berwickense Long, 1976
Protoclepsydropsis kidstoni (Bertrand, 1911) Hirmer, 1927

Rhetinangium sp. Gordon 1912

Sphenopteris bifida Lindley and Hutton, 1832
Sphenophyllum insigne Williamson 1874
Stauropteris berwickensis Long, 1966

Stenomyelon tuedianum Kidston in Scott, 1909*Stenomyelon heterangioides* Long, 1964*Stenomyelon primaevum* Long, 1964*Stamnostoma* sp. Brongniart 1822*Tantaloosperma setigera* Barnard and Long, 1973*Telangium* sp. Benson 1904*Tetrastichia bupatides* Gordon, 1938*Tristichia ovensii* Long, 1962*Triradioxylon primaevum* Barnard and Long, 1975

LIST OF SPECIES BY LOCALITY

Allan Bank Mill Farm—NT 863 544*Lepidostrobus* sp.*Lyginorachis arberi**Stauropteris berwickensis**Bells Burn*—NT 842 565*Lyginorachis whitadderensis**Blue Scaur*—NT 843 566*Alcicornopteris* sp.*Kalymma tuediana**Lyrasperma scotica**Oxroadia gracilis**Protoclepsydrapsis kidstoni**Stenomyelon* sp.*Telangium* sp.*Burnmouth shore*—NT 957 610 to 957 611*Achlamydocarpon scoticum**Archaeocalamites radiatus**Bilignea* sp.*Cladoxylon waltoni**Eristophyton beinertianum**Kalymma tuediana**Lepidodendron calamopsoides**Lyginorachis brownii**Lyginorachis papilio**Lyginorachis waltoni**Lyrasperma scotica**Oxroadia gracilis**Stauropteris berwickensis**Stamnostoma huttonense**Stenomyelon heterangioides**Stenomyelon tuedianum**Triradioxylon* sp.*Tristichia ovensi*

Chirnsidebridge 1—NT 850 556
Genomosperma latens
Eurystoma angulare
Lepidodendron calamopsoides
Lyginorachis arberi
Stauropteris berwickensis

Chirnsidebridge 2—NT 855 556
Dolichosperma pentagonum
Genomosperma latens
Genomosperma kidstoni
Lepidodendron brevifolium
Lyginorachis arberi
Sphenophyllum sp.
Stauropteris berwickensis

Cove 2—NT 786 715
Alcicornopteris
Cladoxylon waltoni
Eristophyton beinertianum
Eristophyton waltoni
Eurystoma burnense
Lyginorachis brownii
Lyginorachis papilio
Lyginorachis waltoni
Lyrasperma scotica
Oxroadia gracilis
Pitus antiqua
Stenomyelon tuedianum
Tristichia sp.

Cove-Horse Roads Bay—NT 787 715
Camptosperma berniciense
Eurystoma angulare
Kalymma sp.
Oxroadia gracilis
Tristichia ovensi

Edington Mill—NT 893 548
Genomosperma latens

Edrom House—NT 825 560
Eccroustosperma langtonense
Lyginorachis arberi
Stenomyelon tuedianum

Gilsland—NY 608 697
Pitus primaeva

Hanna's Bridge—NT 770 525
Genomosperma kidstoni
Heiogramma sp.
Lepidodendron brevifolium

Horse Roads Bay—NY 789 716
Genomosperma latens
Lepidodendron sp.
Stenomyelon tuedianum

Hutton Bridge—NT 921 545
Kalymma tuediana

Lyginorachis waltoni
Psalixochlaena berwickense

Hutton Mill 2—NT 917 545
Eurystoma burnense
Lepidodendron calamopsoides
Stauropteris berwickensis

Hutton Mill 3—NT 914 545
Dolichosperma sexangulatum
Deltasperma fouldenense
Eurystoma angulare
Eurystoma burnense
Genomosperma kidstoni
Hydrasperma tenuis
Lepidodendron brevifolium
Lepidodendron calamopsoides
Lepidostrobus sp.
Lyginorachis kidstoni
Lyginorachis papilio
Protoclepsydropsis kidstoni
Stamnostoma huttonense
Telangium
Triradioxylon primaevum
Tristichia ovensi

Ladykirk Burn—NT 901 480
Lyginorachis waltoni

Langton Burn—NY 771 525
Genomosperma kidstoni
Lepidodendron calamopsoides
Rhetinangium pith

Langton Glen—NT 754 530
Alcicornopteris convoluta
Cladoxylon waltoni
Eurystoma angulare
Lepidodendron calamopsoides
Lepidostrobus sp.
Lyginorachis papilio
Lyrasperma scotica
Kalymma tuediana
Stauropteris berwickense
Stenomyelon primaevum
Sphenophyllum insigne
Tristichia ovensi

Lennel Braes—NT 856 410
Alcicornopteris sp.
Deltasperma sp.
Eurystoma burnense
Kalymma tuediana
Lepidodendron calamopsoides
Lepidostrobus sp.
Lyginorachis papilio
Lyrasperma scotica
Pitus antiqua
Stamnostoma sp.
Stauropteris berwickensis
Stenomyelon tuedianum

Oxroad Bay 2—NT 598 847

Eosperma oxroadense
Oxroadopteris parvus
Stamnostoma huttonense
Tantalosperma setigera
Tetrastichia bupatides

Oxroad Bay—NT 596 847 to 598 847

Bilignea sp.
Buteoxylon gordonianum
Eristophyton beinertianum
Hydrasperma sp.
Oxroadia gracilis
Triradioxylon primaevum

Pettycur 2—NT 2600 8623

Lepidodendron brevifolium
Metaclepsydropsis sp.

West Blannerne—NT 821 560

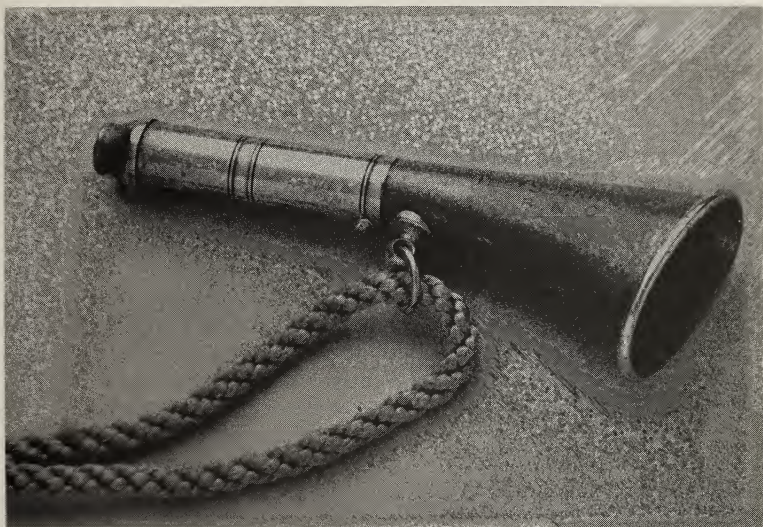
Amelyon sp.
Dolichosperma sexangulatum
Eurystoma angulare
Eurystoma burnense
Eccroustosperma langtonense
Eristophyton sp.
Calathospermum fimbriatum
Cladoxylon waltoni
Clepsydropsis antiqua
Calamopsis sp.
Genomosperma latens
Lepidodendron calamopsoides
Lepidostrobis sp.
Lyginorachis arberi
Lyginorachis papilio
Lyrasperma scotica
Oxroadia gracilis
Pitus primaevum
Protoclepsydropsis kidstoni
Rhetinangium arberi
Stenomyelon heterangioides
Stenomyelon tuedianum
Stenomyelon primaevum
Stigmara
Tetrastichia sp.
Tristichia ovensi
Triradioxylon primaevum

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THE CLUB HORN

D. and L. Mackenzie Robertson



The Club Horn, illustrated above, summons members to join together at field meetings and listen to the speaker and also to ensure silence to be able to do so. It is made of copperized brass and nickel, 14 cm. long with a bell of 4.5 x 3.0 cm. It is a "reed" instrument

The horn was presented to the Club sometime between 1927 and 1936 by Colonel G. F. T. Leather of Middleton Hall, Belford, Northumberland, according to Mr. W. R. Elliot, a former Club Secretary. It is thought to be much older than that time. It was originally intended for use in hunting a pack of beagles; although smaller than a fox-hunter's horn it nevertheless has considerable acoustic power. It has recently been insured on the advice of a professional valuer for £100.

Colonel Leather (1865-1941) was granted a commission in the Northumberland Militia in 1882 and in the 5th Northumberland Fusiliers in 1886, serving first with the 1st Battalion in Ireland. In 1887 he carried the Regimental Colour at the Jubilee of Queen Victoria. The Colour he carried was the one that had been carried throughout the Peninsular War; it was then flying for the last time before it was laid up. After 5 years as Adjutant to the Northumberland Militia Captain Leather resigned his commission to settle down on the estate he had inherited at Belford, taking an especial

interest in forestry. He took a keen interest also in local history and was twice President of the Club. His Obituary appeared in the Regimental Journal of the Royal Regiment of Fusiliers (St. George's Gazette of 31 May 1941) to which we are indebted for some of the information given above.

TWENTIETH CENTURY WEATHER AT LOCHTON, COLDSTREAM, BERWICKSHIRE

Henry A. Aitchison

I have been asked to contribute an article about the weather here, as recorded by my father and myself. What a boring subject to write about!

But keeping records has its uses and in support of this I quote *verbatim* from a recent bulletin issued by the Meteorological Office in Edinburgh: "Firstly, there are a large number of people who need to know what the weather was like at a particular time and place. Legal and insurance firms need to check up on the weather associated with accidents while building contractors may need to prove that adverse weather was responsible for causing the work to be behind schedule. Secondly, long period climatological observations are needed to provide design criteria for all sorts of structures—to prevent a repetition of the sagas of the Tay and Forth rail bridges—the first of which was blown down and the second of which is thought to be twice as strong and expensive as it needed to be."

Rainfall measurements in particular are of interest to water and drainage engineers who will wish to know how strong structures such as dams and culverts will need to be. They will want to know the answer to questions like: How often can we expect a fall of 100mm of rain in 24 hours at this site? A long term and well-maintained daily rainfall record from a nearby gauge can provide the answer.

My father came to this farm in May, 1903 and started to keep rainfall records in the October of that year. I believe that he was encouraged to do this by his brother-in-law, James Hewat Craw, of West Foulden. Craw was a man of very wide interests and was a very active member of the Berwickshire Naturalists' Club. My father continued to do this until he retired in 1938; I have continued recording up to the present day, except for the war years when I was very fortunate to have a wife who was prepared to continue with this as well as coping with all her very many other daily chores.

Measuring is done daily at the laid-down time of 9 a.m. Cards are issued by the Meteorological Office in Edinburgh. On them I make a note of each day's weather and the rainfall, if any, and then send them off at the end of each month, keeping a note of each day's weather in the Farm Diary. (There are quite a few diaries here now!) As a result of this I can quite quickly lay my hands on any untoward incident.

Lochton Farm is situated on the north bank of the Tweed, midway between Kelso and Coldstream (Map reference: NT 776389).

The rain gauge stands in a garden, well clear of buildings and other impedimenta—some 120 feet above sea level. I measure officially in millimetres but convert to inches for my own use and in order to maintain continuity.

This is a dry area, the yearly average (1904 to 1987 inclusive), being 25.17 inches, made up as follows:

January	2.04 inches
February	1.54
March	1.76
April	1.55
May	1.55
June	2.03
July	2.51
August	2.94
September	2.20
October	2.61
November	2.38
December	2.06
Total	25.17 inches

Here are one or two salient features:

Wettest year 1916	37.48 inches
Driest year 1972	16.21 inches
Wettest day 12 August 1948	4.86 inches (See further below)
Wettest month August 1948	9.03 inches
Driest month March 1929	0.02 inches

12-13 August 1948. I made three separate readings when I realized the severity of the rain.

At approximately:	1500 hrs, 12 August, 0.72 inches
	2130 hrs, 12 August, 2.42 inches
At	0900 hrs, 13 August, 1.72 inches
24-hour total	4.86 inches

Unfortunately, in spite of taking intermediate readings, my bottle was full at 2130 hrs on the 12th! I therefore feel that I must have lost a certain amount. Other readings in the neighbourhood have suggested that the day's total might have been in the vicinity of 6 inches.

As regards frost, I measure quite simply with a thermometer on a stake a few feet above the ground. From the records I see that, measuring in Fahrenheit, we recorded 40° of frost on the morning of Sunday 4 January, 1941. This was, of course, exceeded by the

exceptional frost of January 1982 when on the 11th the thermometer registered 44° Fahrenheit below freezing point.

One other unusual item. On Boxing Day 1979 I was awakened about 4 a.m. by what I immediately recognized as an earthquake (having been well-used to them while living in Japan). This lasted for quite a few seconds and the whole house shook and windows rattled. Later, we heard that the centres appeared to be in the Longtown, Dumfriesshire, area and that the 'quake' measured over 5 on the Richter Scale—though I find this measurement difficult to believe.

May I conclude this rather dull article on a lighter note? Some years ago I met an old and very distinguished friend from up north, whose records appeared monthly in *The Scotsman* (and still do). On my making reference to his rainfall figures, his reply was "Treat my recordings with a modicum of reserve". I looked out of my study window the other morning and saw my male retriever closely examining the rain gauge." Enough said!

OBITUARY—JOHN SHIEL WALL

John Wall was President of the Club for the year 1978-79. He died suddenly in his garden at Spittal, on the 29th June, 1987. He had been a member of the Club since 1970 and served on the Club's Council from 1974 until his death.

John was born on the 28th October, 1911, in Berwick-upon-Tweed. He always took a pride in being a native Berwickier, although as a young boy he lived on his grandfather's farm, Dykegatehead, near Whitsome. He was a solicitor by profession, admitted at the early age of 21 after serving articles locally. He then decided to make his career in local government. He first served as Junior Assistant Solicitor at Stoke-on-Trent. He moved from there to Rotherham, where he remained for the remainder of his career, rising by promotion to become at 34 the youngest Town Clerk of a County Borough in England. He served Rotherham with distinction until 1968, when threatened ill health compelled his early retirement.

He, and his very supportive wife, Anne elected to return to their native town, a course often considered difficult but which for them proved successful and happy. In Berwick he regained his health and was soon able to take an active interest in local affairs. His experience in public service was quickly and rightly appraised and the Berwick Preservation Trust, whose work so much admired, wisely recruited him as their Director. He served in that post for three years. Subsequently he was elected to the Borough Council. He was Sheriff in 1976-77 and Mayor in 1981-82. He was an Honorary Alderman in 1983. He was thus, and deservedly, honoured in his native place.

John's service as the Club's President came between his years of holding these high Civic offices. It was therefore natural that he should draw on his civic interest and knowledge to produce a noteworthy Anniversary Address on the subject of "The Archives of the Borough of Berwick-upon-Tweed".

Despite attaining positions of leadership professionally, in civic affairs in Berwick, and in the Club, John was essentially a quiet and humble person. Physically a big man, with a fine presence, he never exerted influence by relying on these attributes but made his leadership contributions gently, often with quiet, kindly humour. He relied on a clear perception of desirable ends and on garnered wisdom from his years of public service. He was a very well respected and worthy President of the Club.

H. D. Jeffries

FIELD NOTES AND RECORDS—1987

Plants

Iberis umbellata L. In late July, 1987, Mr. H. F. Church, of Berwick-upon-Tweed, collected four plants of this species, apparently casual annuals, 6-8 inches high, with asymmetrical closely-bunched mauve flowers, along the new road on the north bank of the Tweed (VC 68, NT 95). They were identified by the Royal Botanical Garden Herbarium, Edinburgh, as this crucifer, a member of the same genus as the common garden candytuft.

The plant was recorded on the banks of the Ettrick and Tweed, Selkirk, by I. M. Hayward in 1910 (see: Hayward and Bruce—*The adventive flora of Tweedside*, p. 275, no. 253) and is thought to be alien, possibly introduced by agriculture or gardening.

Lepidoptera

Xanthia gilvago D. & S. Dusky Lemon Sallow. 13 September—one at light, Berwick-upon-Tweed. The larva of this species feeds on the fruits of the Wych Elm, as this tree is threatened by Dutch Elm Disease, it is possible this moth will also be threatened.

Lycaena phlaeas L.—Small Copper, 8 September—one by the new road on the left bank of the Tweed.

A. G. Long

Birds

Grus grus L.—Crane, 8-15 May—two were sighted by Mr David Graham in a barley field at New Mains, Reston (NT 878613). The field used to be a marsh and the birds were feeding on the barley shoots and grains. Both birds were sub-adults, having head markings but no red patch. One bird was larger than the other, probably male and female. The larger bird had greyish upper parts, the smaller was coloured more creamy buff. Both had the dark grey drooping "tail" formed by the elongated inner secondaries. The face had a light cream, stripe extending well down the neck. The wings were black. In flight the head and neck, and the legs, were held extended. They flew off each evening at about 8 p.m. and returned in the morning. Their call was a guttural KRRR.

Mrs M. Edgar

Notifying my sighting of a crane at Hule moss, near Greenlaw, in August, 1984, to the *Scottish Bird Report*, elicited the information that a crane, presumably the same bird, had been reported 4 times earlier that year, at Mellerstain in May, at Grantshouse and at Fairnington, near Jedburgh, in June and at Burnmouth in July; and that the last previous record for the species in this area was at Hawick in 1874.

W.H.R.L.

FIELD SECRETARIES' REPORT—1987

FIRST MEETING

Thursday, 14th May. Leith. Trinity House, formerly the Headquarters of the Forth pilots; a handsome building with a unique collection of Leith maritime history. South Leith Church, dating from 1483, was originally much larger but was badly damaged during the siege of Leith in 1560. A "walk-about" in Leith noting its fine restorations.

SECOND MEETING

Wednesday, 17th June. Abbotsford House, home of Sir Walter Scott, containing Sir Walter's treasures. Huntlyburn, the Borders General Hospital, soon to be opened for patients, was most impressive. Melrose Station, transformed from a derelict building into its former glory as the pride of the Edinburgh-Carlisle link of the railway to London.

THIRD MEETING

Thursday, 9th July. Luffness House, a historic, fortified dwelling with beautiful furnishings and lovely gardens of ancient origin. Also its monastic ruins. Aberlady Nature Reserve, on the shore side of Luffness House, a great attraction for all botanists and ornithologists. Luffness Mill House. Beautiful gardens with many plants unusually seen in Scotland.

FOURTH MEETING

Wednesday, 19th August. Lilburn Tower with rare furnishings and pictures and beautiful gardens. Chillingham Castle, one of the most important examples of fortified domestic architecture, dating from the 13th century and now extensively renovated. Parish Church of St. Peter, showing Norman features. Within the Lady Chapel (13th century) is the ornate and beautiful table tomb of Sir Ralph Grey and his wife. A conducted walk to view the famous Wild Cattle herd.

FIFTH MEETING

Thursday, 17th September. Warkworth. St. Lawrence's Church, part Saxon, part Norman, with bells dating from the 14th century. A "walk-about" the village especially to see the very fine mediaeval bridge. Warkworth Castle, dating from 13th century, it is on the site of a former motte and bailey. Warkworth Hermitage, probably 14th century, hewn out of the rocky cliff beside the River Coquet.

EXTRA MEETINGS

Thursday, 4th June. Gordon Moss. Essentially a botanical meeting.

Wednesday, 21st October. The Wine Museum, Palace Green, Berwick. In the morning prior to the Annual General Meeting.

At every meeting more than 100 Members attended, on one occasion over 140.

REPORT OF THE LIBRARIAN 1987

Mr Ross's Library is now established at the Barracks Museum and a preliminary stock-taking has taken place. It now requires classification to make it more readily usable by readers. However, the books are available to those entitled to use them, together with the Club Library which consists mostly of runs of periodicals which we exchange with other societies.

We are now trying to complete the holdings of the BNC History at the copyright Libraries, but have no spare copies of the issue of 1981. However, several members have given copies surplus to their requirements, and for these the Club is most grateful.

LIBRARIAN'S FINANCIAL STATEMENT FOR YEAR ENDED 20 SEPTEMBER, 1987.

<i>Income</i>		<i>Expenditure</i>	
Opening Balance	713.76	Postage	9.16
Sales of BNC History	53.00	Stationery	1.34
Interest	26.65	Balance fwd	782.91
Total	793.41		793.41

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDED 20th SEPTEMBER, 1987

INCOME		EXPENDITURE	
Balance in Bank as at 21/9/86	£7.87	Printing (including Index)	£3,853.05
Subscriptions		Printers' Postages	173.69
Annual, Junior & Libraries	1,685.50	Subscriptions Paid	
Entrance Fees & Badges	56.00	Scottish Region of	8.74
Interest-free Loan to cover cost of		Archaeological Society	
Index	3,500.00	Association for Protection of	
Interest on part of Loan invested		Rural Scotland	10.00
in Newcastle Building Society		Berwickshire Council of Social	
Short Term Account until		Service	4.00
balance of Loan received	9.59	Sundries	
Sundries		Refund of Subscriptions	
Visitors' Fees at Meetings	66.00	overpaid	28.00
Donations	46.25	Library Insurance	35.00
Arrears of 1985/86 Subscriptions		Donation invested in Barbara	
received	43.50	Fleming Memorial Fund	5.00
Advance of 1987/88 Subscriptions		Stanley Jamieson, gratuity	
received	5.00	(Guide at Leith Walk-about)	20.00
Refund of Income Tax 1985/86	154.78	Officials' Expenses	
Sale of Club Ties	4.50	Lady McEwen, Editing Secretary ..	12.50
Subs paid twice (refunded)	31.00	Mr and Mrs D. Mackenzie	
Donation to Barbara Fleming		Robertson, Joint Field	
Memorial Fund included in		Secretaries	510.49
Subscription payment	5.00	Miss S. G. Stoddart, Treasurer	
Money collected for orders of		& Corresponding Secretary	48.09
Index of History	211.00	Transferred to Deposit Account	1,000.00
Collection for Guide at Leith		Balance in Bank as at 20/9/87	143.83
Walk-about	26.40		
	<u>£5,852.39</u>		<u>£5,852.39</u>
Balance on Current Account as at 20/9/87	£143.83		
Balance on Savings Account as at 20/9/87	£2,978.42		
			Audited and found to be correct and in good order.

Audited and found to be correct
and in good order.

Andrew Walker, Royal Bank of Scotland,

ADVICE TO CONTRIBUTORS

The History of the Berwickshire Naturalists' Club has now run continuously for more than 150 years and has recorded a huge amount of information about every aspect of life in the Borders—its archaeology, history, sociology and natural history. It is an invaluable repository for primary information about the Borders and the Club would like to extend its function in this regard. To encourage contributions from people who may perhaps be inhibited by unfamiliarity with the preparation of manuscripts for publication the following notes are included in the *History*.

Contributions

Manuscripts should, if possible, be typed, double-spaced but even handwritten documents, if clearly legible, can be considered. Figures should be numbered consecutively and provided with short descriptive legends. Reference to other publications in the text are most simply done by author name(s) and date of publication and listed in alphabetical/chronological order at the end of the paper. As examples:

- Baxter, E. V., Rintoul, L. J. (1953) The birds of Scotland. Edinburgh: Oliver and Boyd.
Boyd, H., Ogilvie, M. (1969) Changes in the British wintering population of the pinkfooted goose from 1950-1975. *Wildfowl*, 20, 33-46.
Taylor, G. (1937) List of fungi observed in the neighbourhood of Cockburnspath. *History of the Berwickshire Naturalists' Club*, 29, 303-313.

Sometimes references to other publications/authors, documents, episodes, etc., in the text are more appropriate by superscript numbers, e.g.: "the house of Netherbyres⁵" and then related to a numbered entry in a list of references/notes at the end of the paper:

"5. Scottish Record Office TD 78/7."

Field Notes and Records. Notes of unusual occurrences are welcome and of great value for future workers. For maximum usefulness, they are best reduced to their essentials.

Contributions can be sent direct to the Editing Secretary, or handed to any Council Member.

HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

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